

V&V Reference Report

L2 ASCDS Version : 10.7.1

Observation 22240 - L2 Version 1
Chandra X-Ray Center

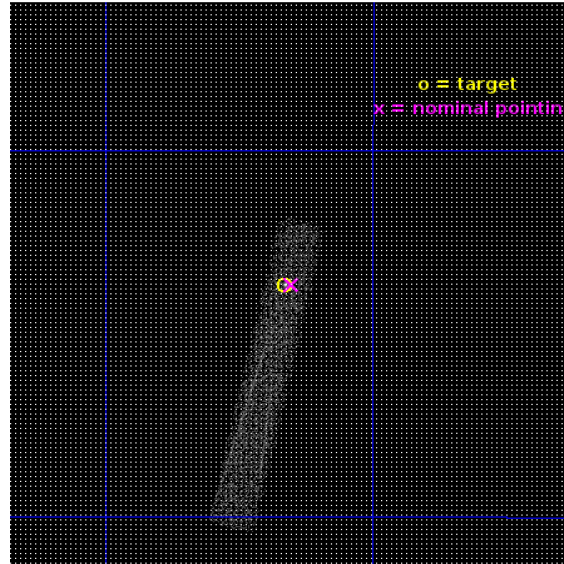
L2 Processing Date : Jun 16 2019

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1 Front

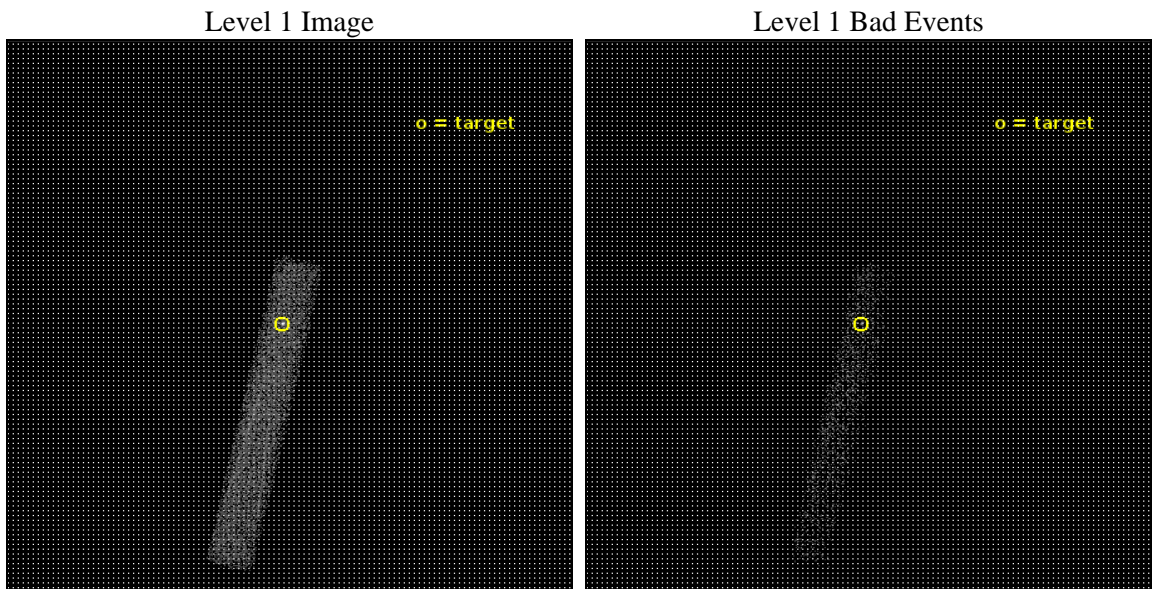
seq_num	703897	Sequence number
obs_id	22240	Observation id
title	Chandra observation of the gravitationally lensed balzar PKS 1830-211 during its brightest outburst	Proposal title
observer	Sara Buson	Principal investigator
object	PKS 1830-211	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	278.41625	Observer's specified target RA [deg]
dec_targ	-21.061194	Observer's specified target Dec [deg]
ra_nom	278.41304215837	Nominal RA [deg]
dec_nom	-21.061230356904	Nominal Dec [deg]
roll_nom	102.51721131455	Nominal Roll [deg]
revision	1	Processing version of data
ontime	10069.508752227	Sum of GTIs [s]
livetime	9132.5129260175	Livetime [s]
ontime7	10069.508752227	Sum of GTIs [s]
l2events	8656	Number of level 2 events



2 OBI

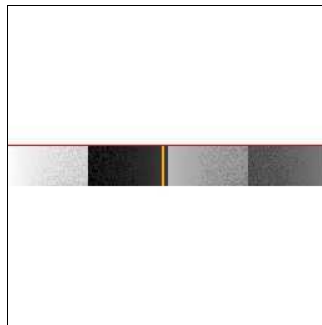
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.7.1	Processing system revision	ontime	10069.508752227	Sum of GTIs [s]
caldsver	4.8.3	 	ontime7	10069.508752227	Sum of GTIs [s]
date	2019-06-16T23:53:51	Date and time of file creation	l1events	16037	Number of level 1 events
revision	1	Processing version of data	tgmetho	TGDETECT	Method used to create src1a file
			zo_pos	(4075.38, 4097.43)	src1a sky pixel position

2.1.4 Events

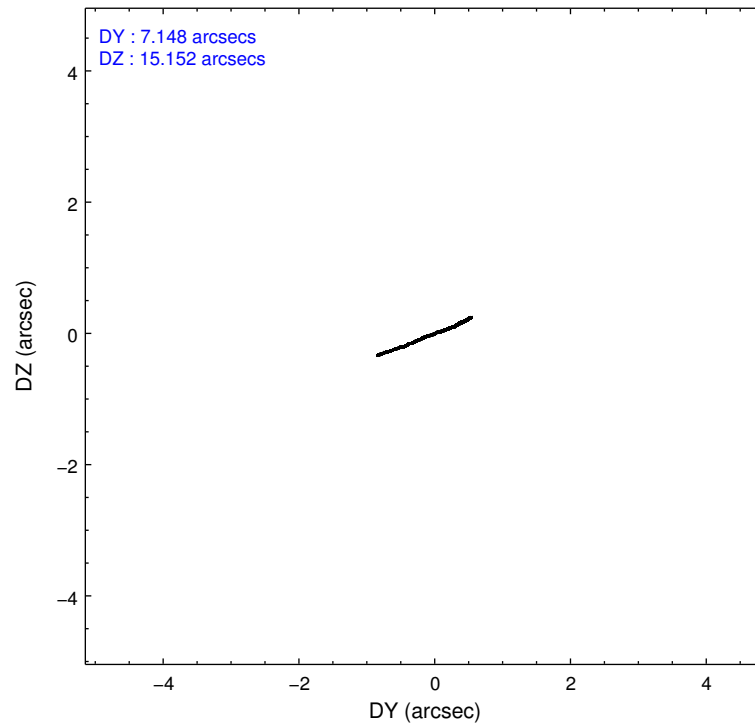
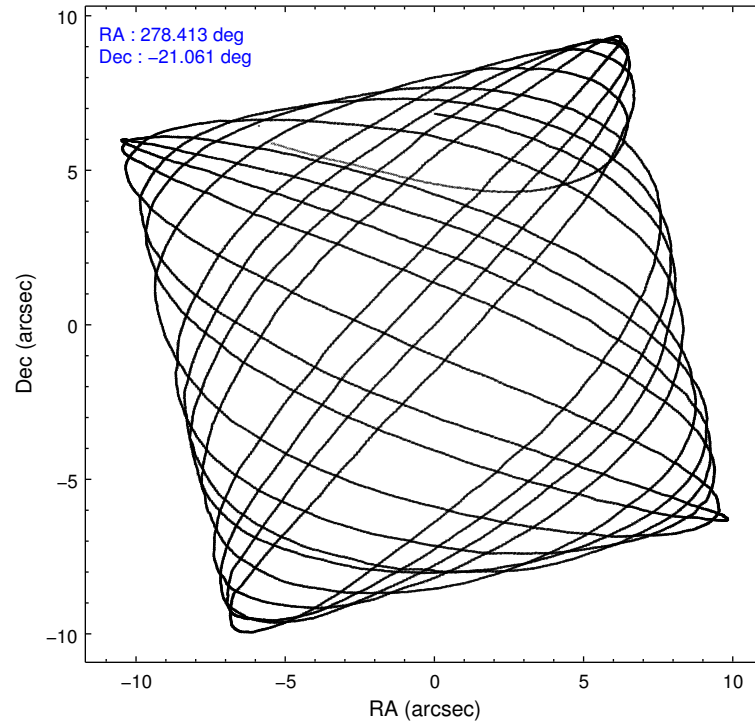
	ccd 7
level 1 events	16037
rejected events	7107
rejected %	44%

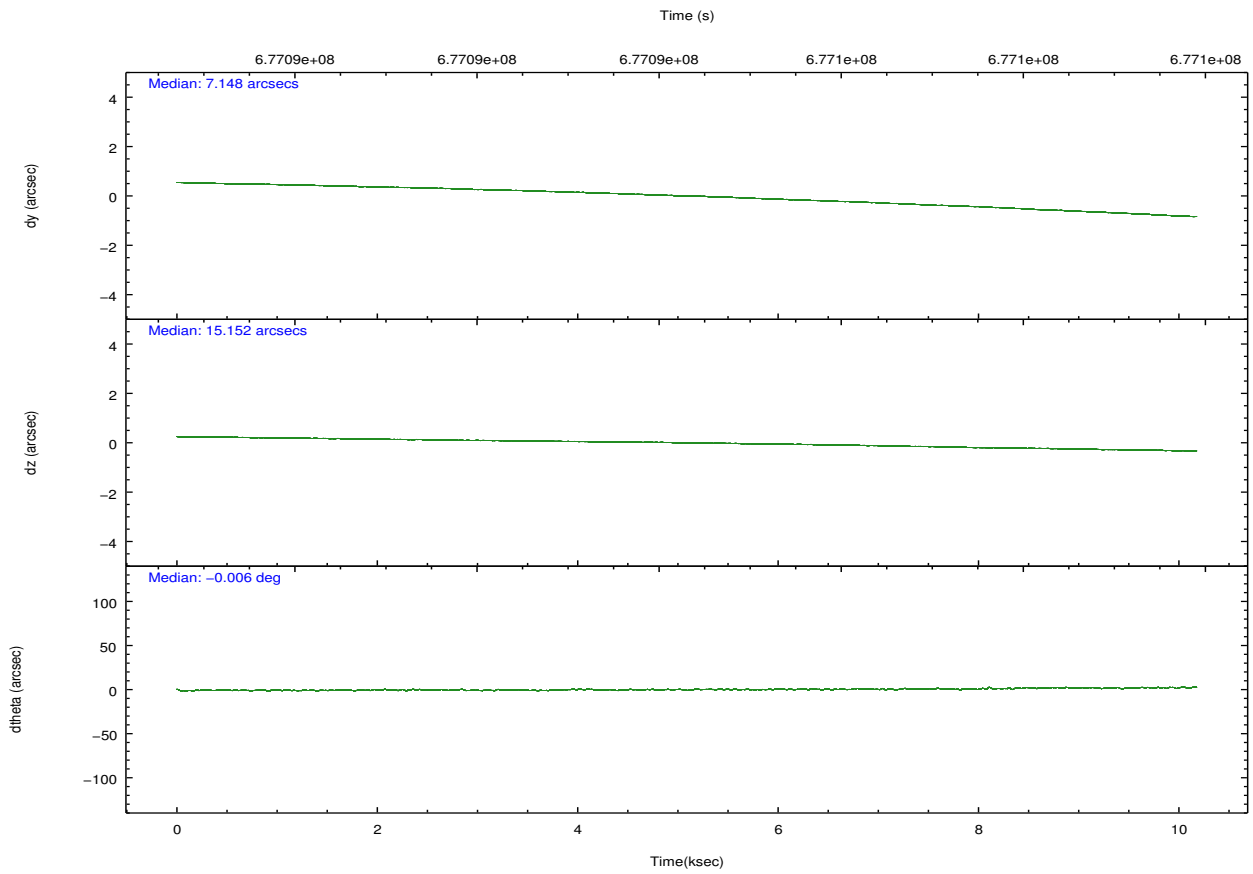
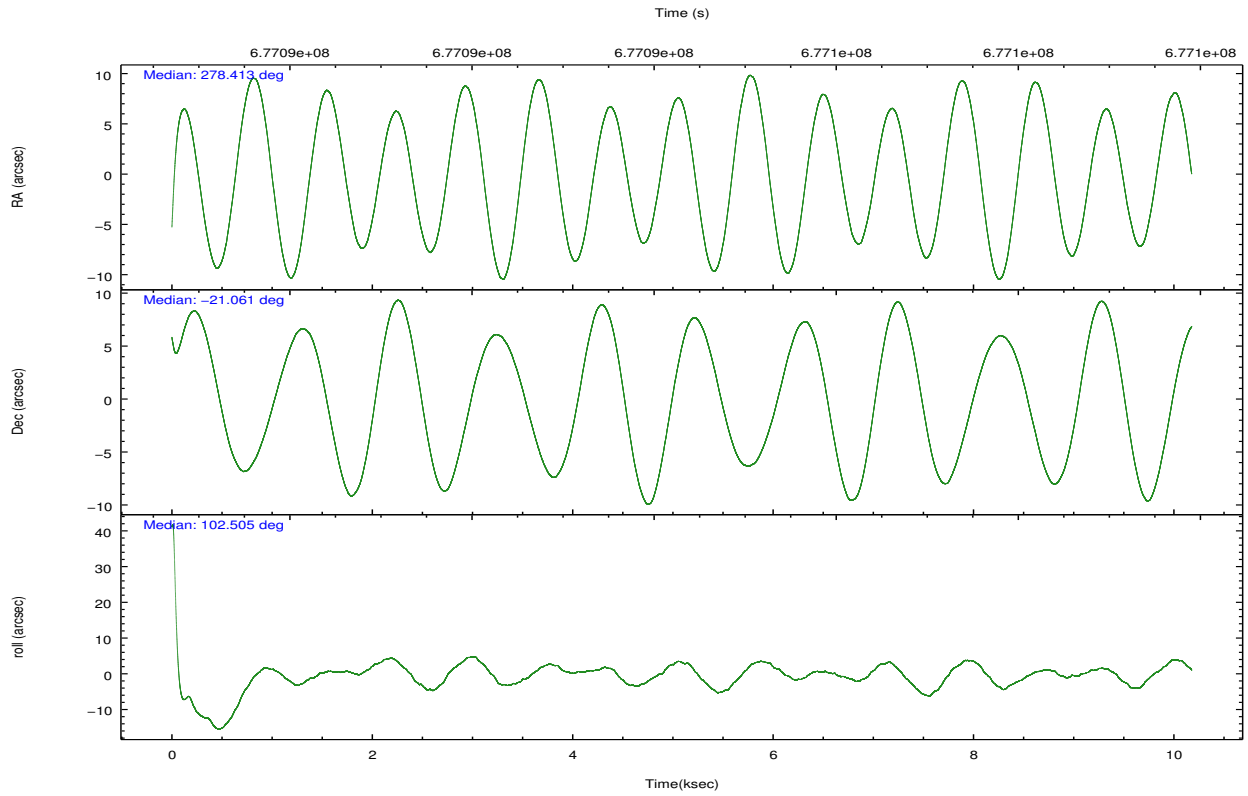
	ccd 7
grade 0 events	1145
	7%
grade 1 events	25
	0%
grade 2 events	1824
	11%
grade 3 events	1066
	6%
grade 4 events	1075
	6%
grade 5 events	1335
	8%
grade 6 events	3820
	23%
grade 7 events	5747
	35%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-7	ACIS-7	Obspar file type	PREDICTED	ACTUAL
Grating	HETG	HETG	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	278.433179	278.413042158368	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	-21.081234	-21.0612303569037	Subarray start row	449	449
[deg] Pointing Roll	102.367746	102.5172113145456	Subarray row count	128	128
[mm] SIM focus pos	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
[mm] SIM defocus	0	0.001444936568705701	[s] Primary exposure time	0.000000	0.4
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	677089397.184000	677088126.39872			
Observation start date	2019-06-16T16:22:08	2019-06-16T16:02:06			
[s] Observation end time (MET)	677099397.184000	677100495.07447			
Observation end date	2019-06-16T19:08:48	2019-06-16T19:28:15			
Read mode	TIMED	TIMED			

2.3 Aspect



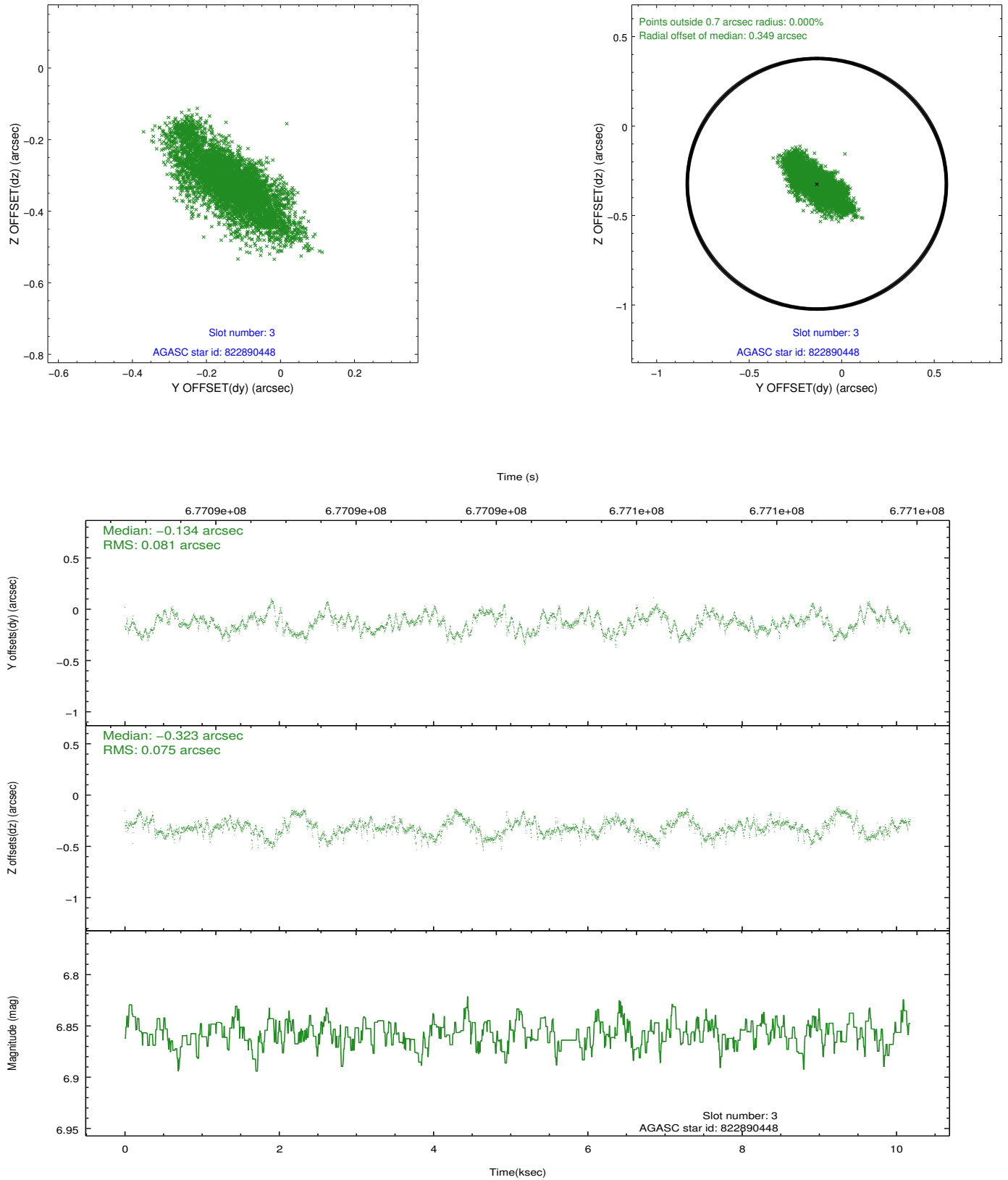


Slot Statistics

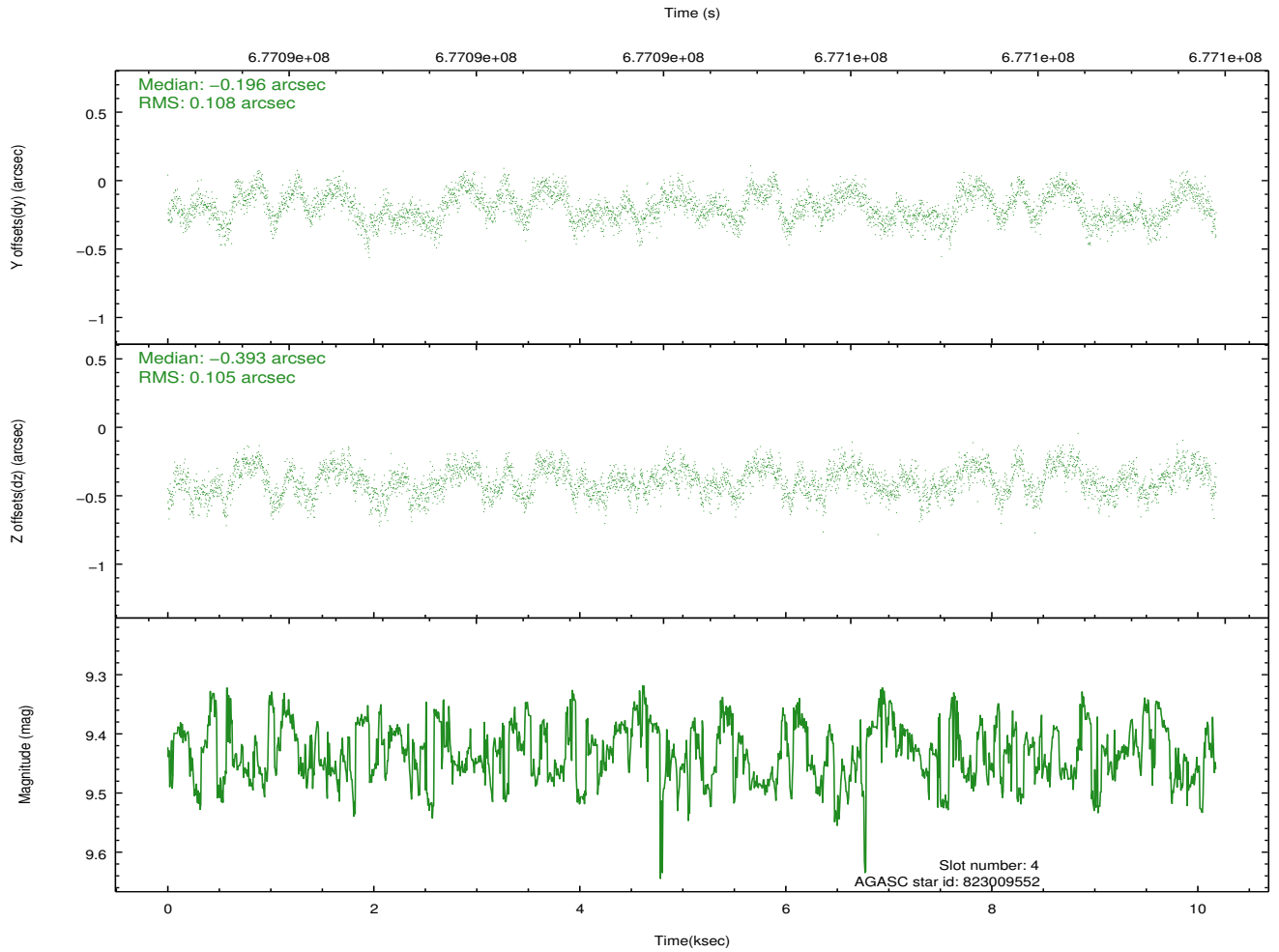
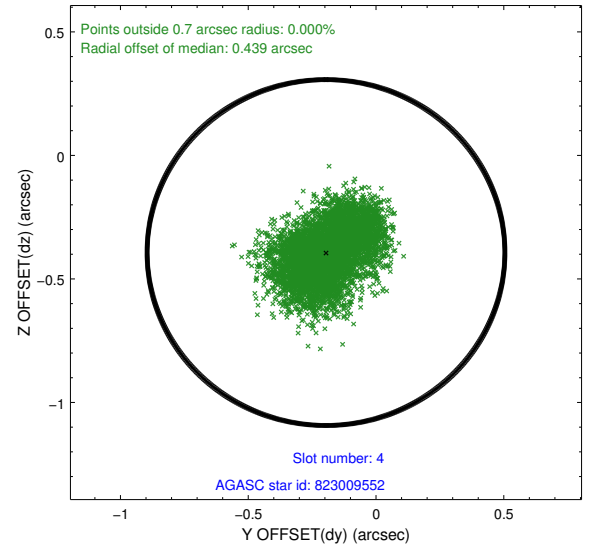
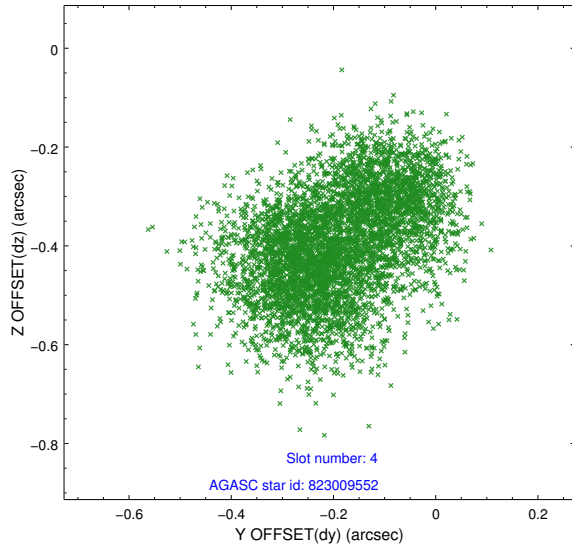
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.06	2483	1.000	-0.258	-0.068	0.018	0.027	0.000000	0.000000	-760.04	-1736
1	FID		ACIS-S-4	7.21	2483	1.000	0.566	0.143	0.011	0.016	0.000000	0.000000	2153.75	171
2	FID		ACIS-S-5	7.18	2483	1.000	-0.338	-0.065	0.016	0.023	0.000000	0.000000	-1812.37	165
3	GUIDE	used	822890448	6.86	4966	1.000	-0.134	-0.323	0.118	0.202	277.870792	-21.249416	-190.72	1973
4	GUIDE	used	823009552	9.44	4959	1.000	-0.196	-0.393	0.165	0.248	278.196588	-20.839906	1018.53	592
5	GUIDE	used	823010120	8.32	4962	1.000	0.180	0.501	0.098	0.150	278.797500	-21.355824	-1227.66	-980
6	GUIDE	used	823010144	8.03	4963	1.000	-0.008	-0.042	0.080	0.125	278.155693	-21.242957	-370.42	1034
7	GUIDE	used	823012712	6.79	4965	1.000	0.155	0.266	0.120	0.186	278.838881	-20.840446	553.29	-1518

2.4 Star Slots

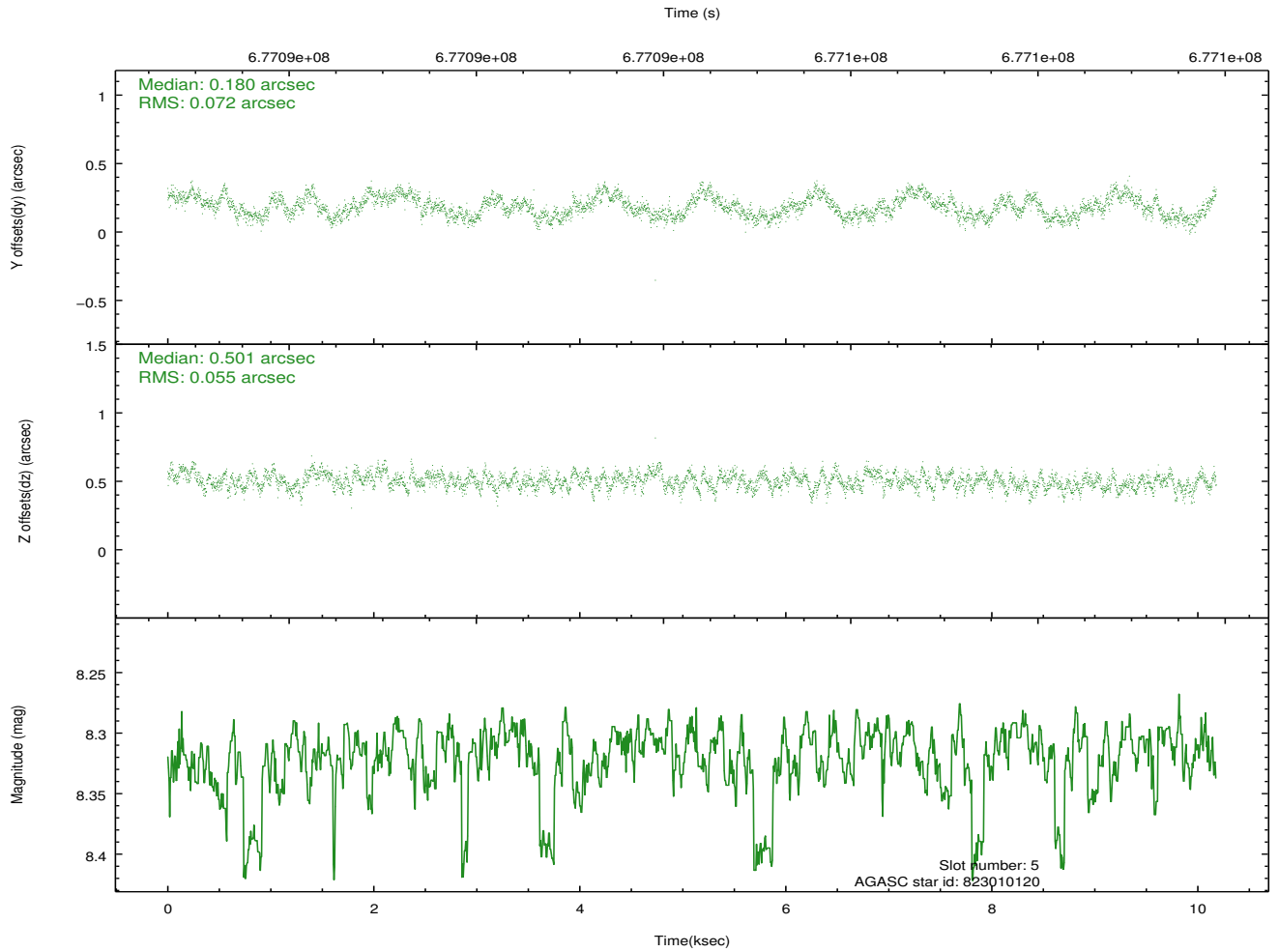
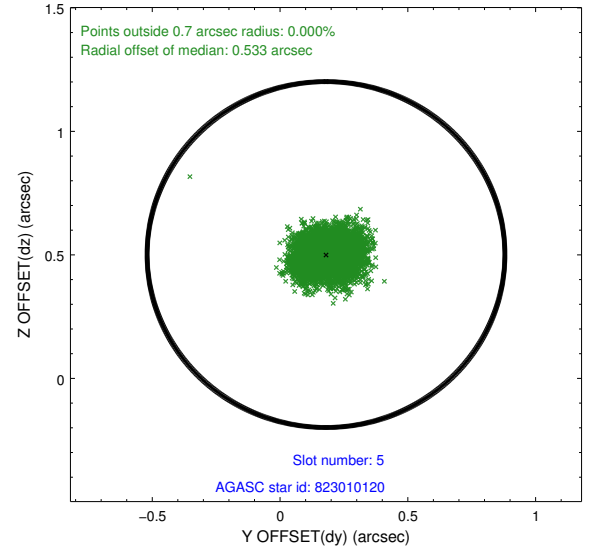
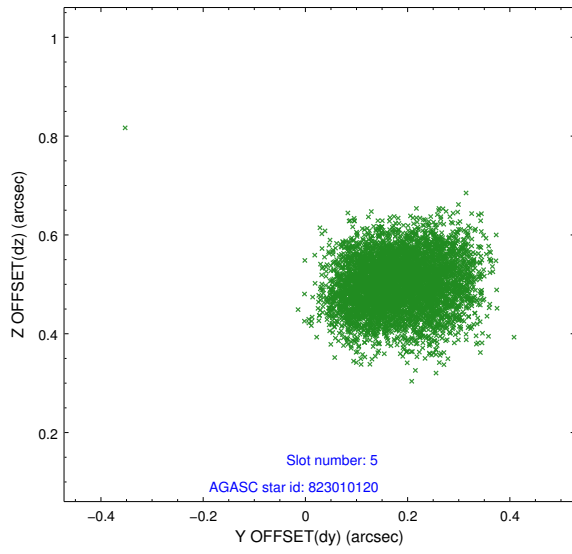
2.4.1 Slot 3



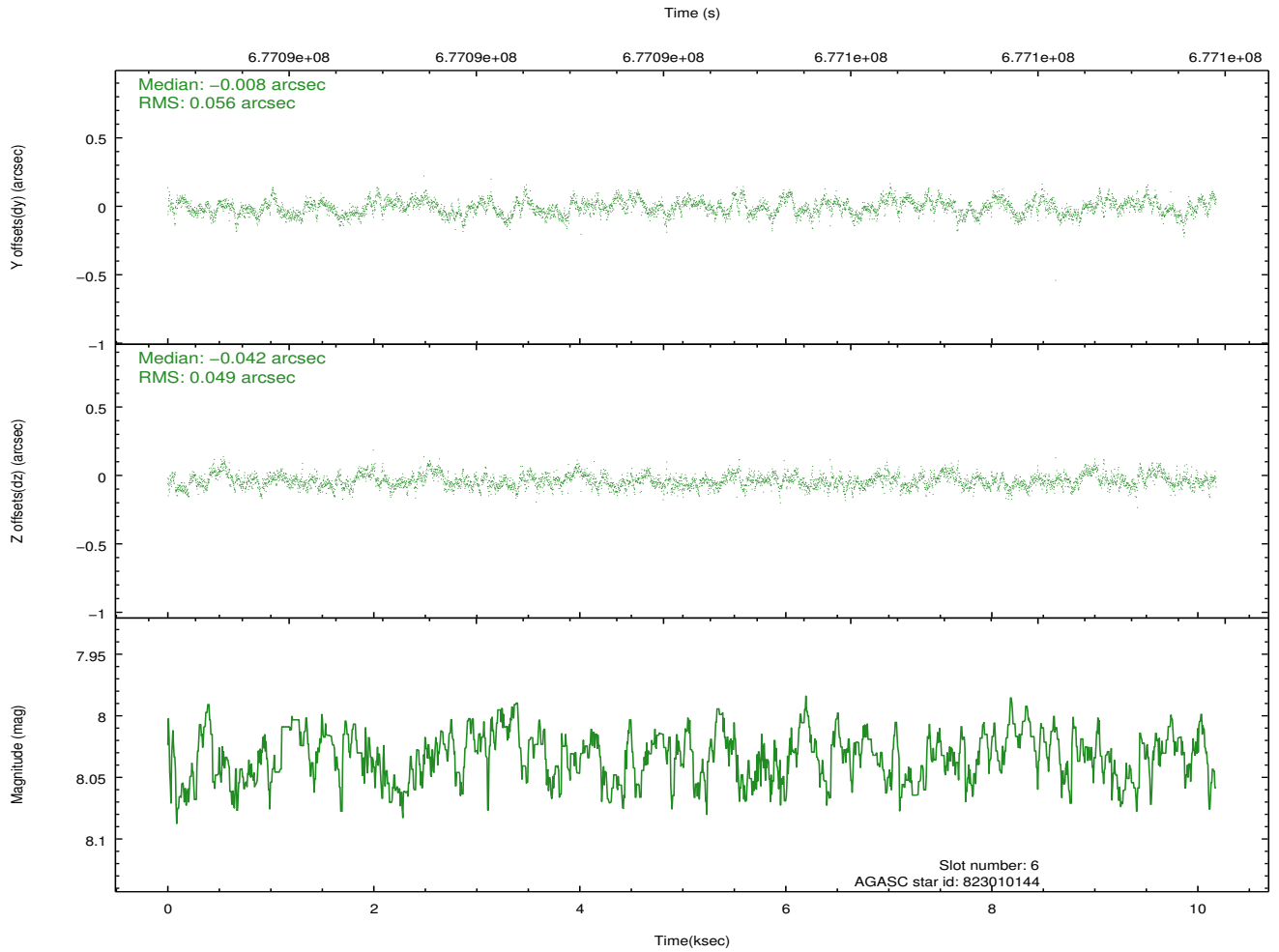
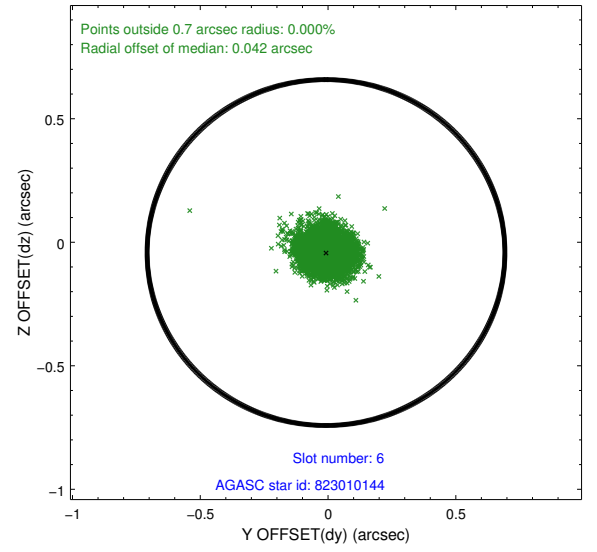
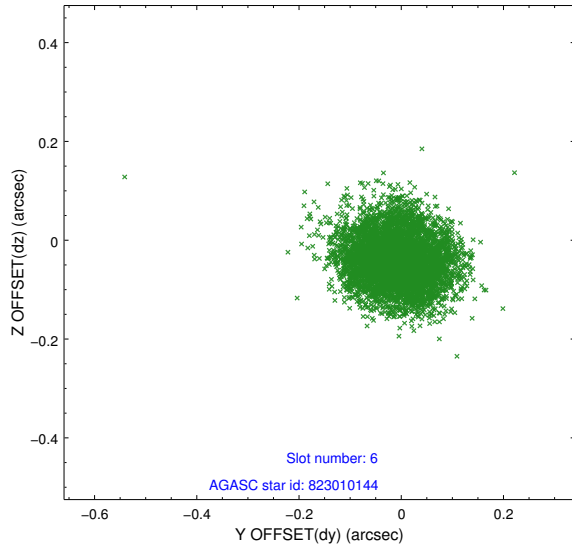
2.4.2 Slot 4



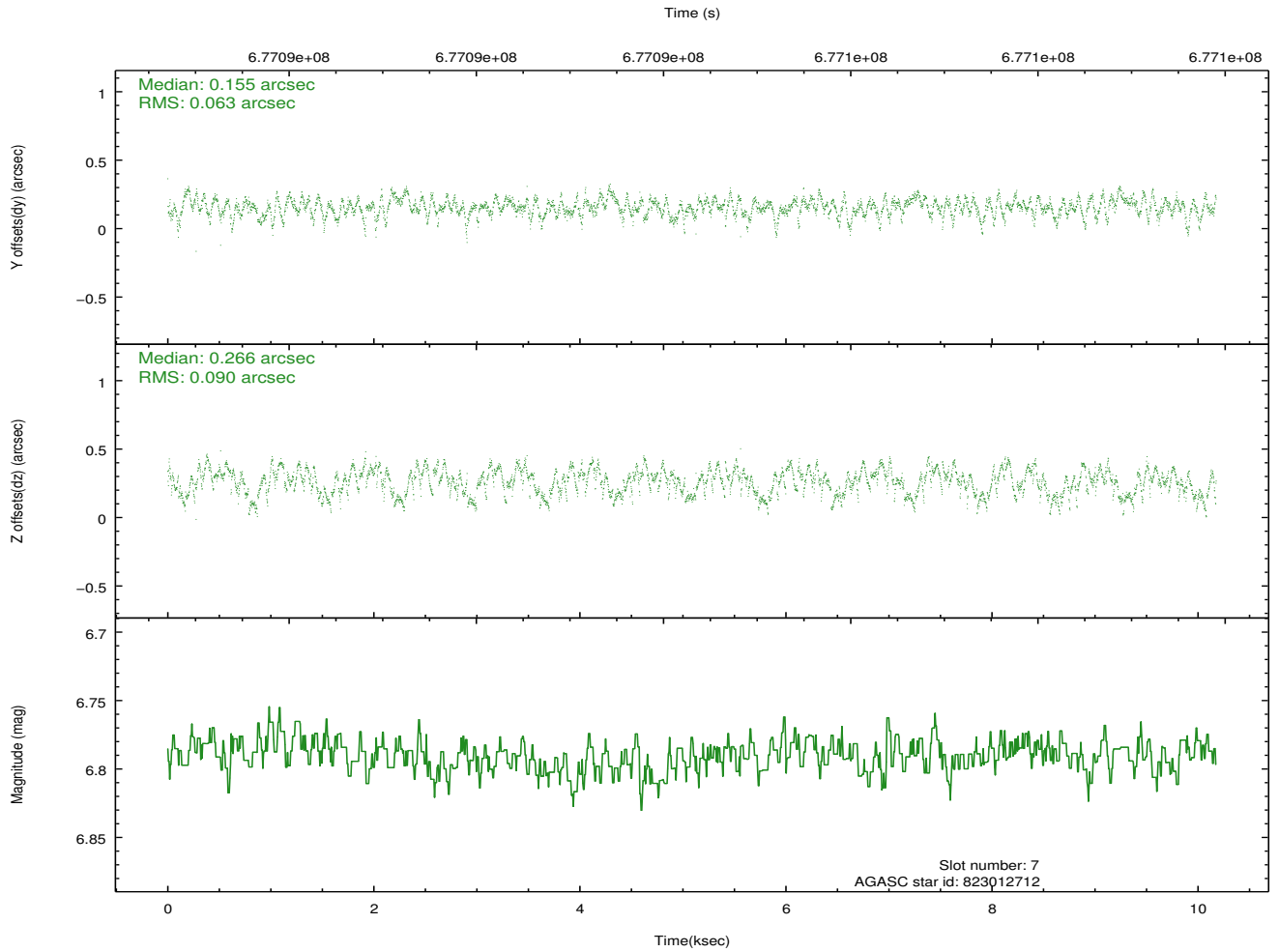
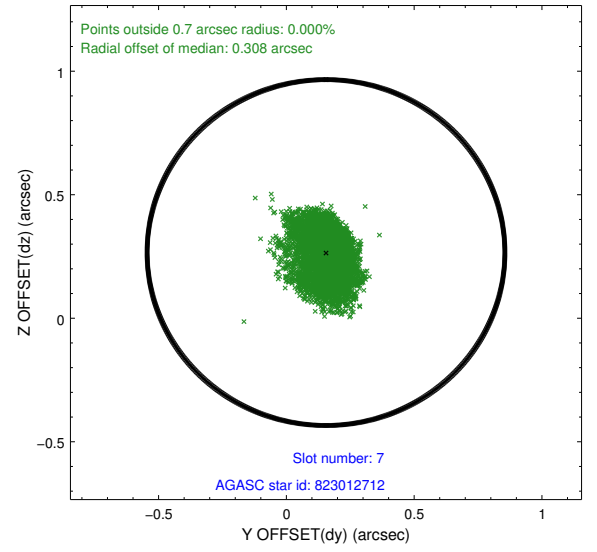
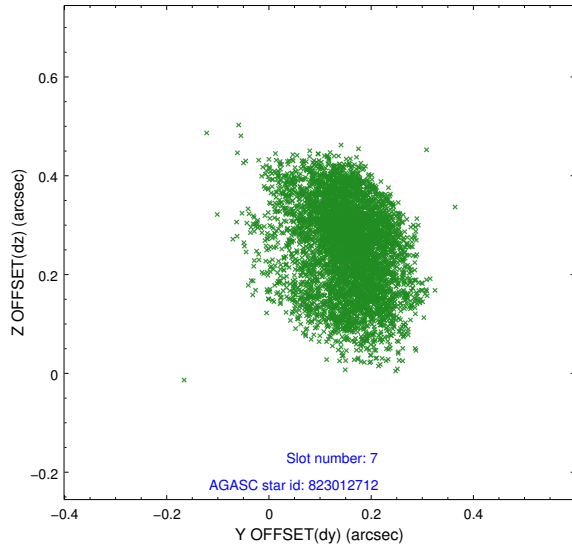
2.4.3 Slot 5



2.4.4 Slot 6

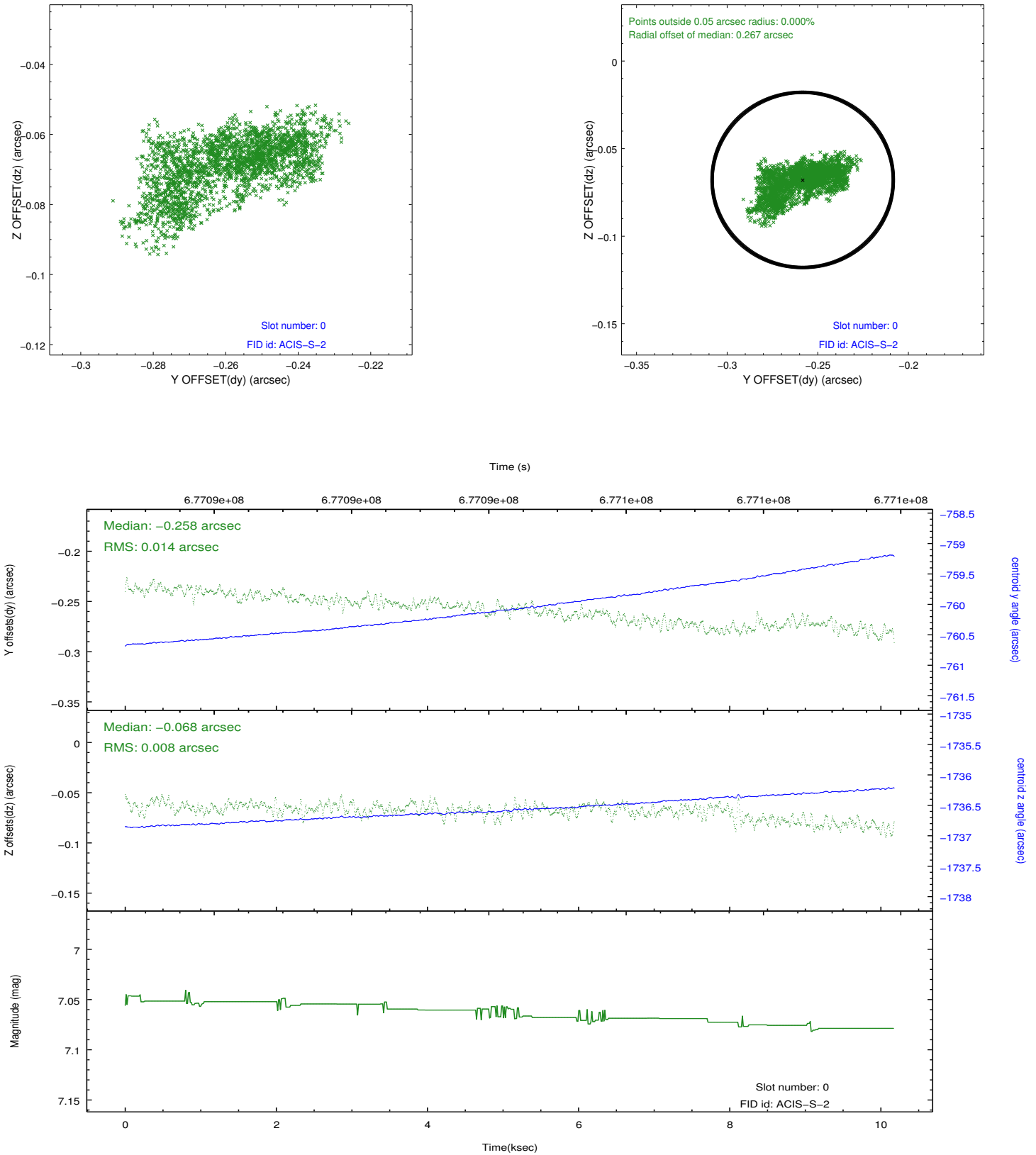


2.4.5 Slot 7

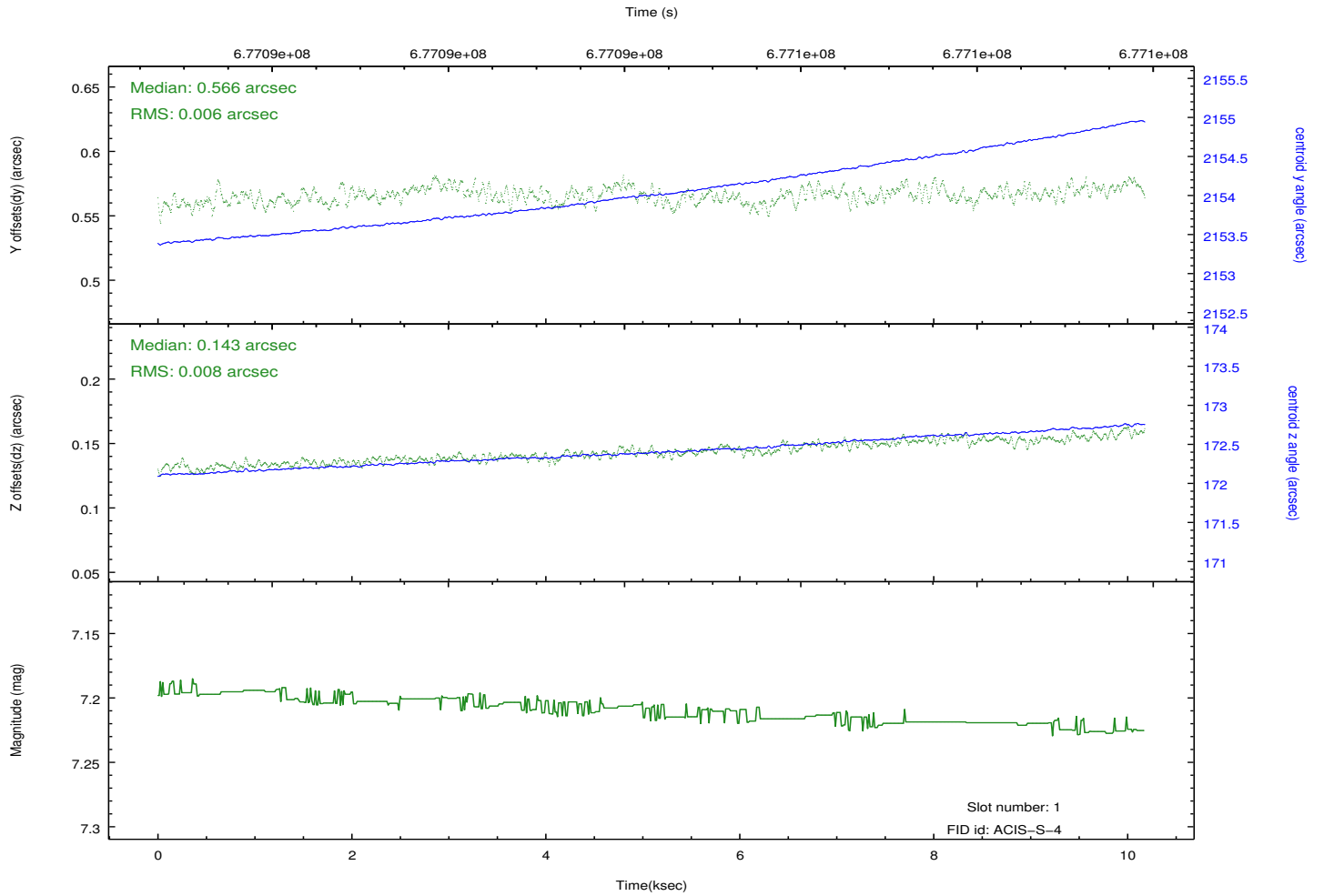
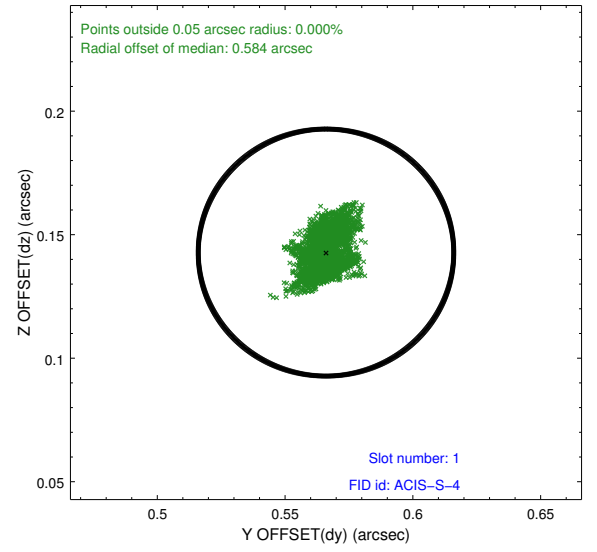
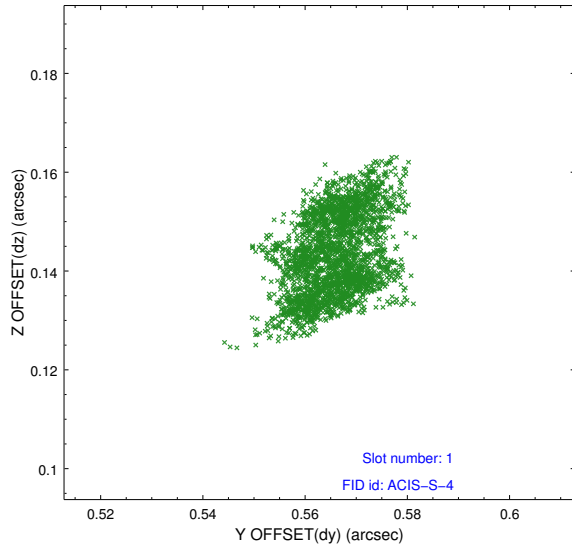


2.5 FID Slots

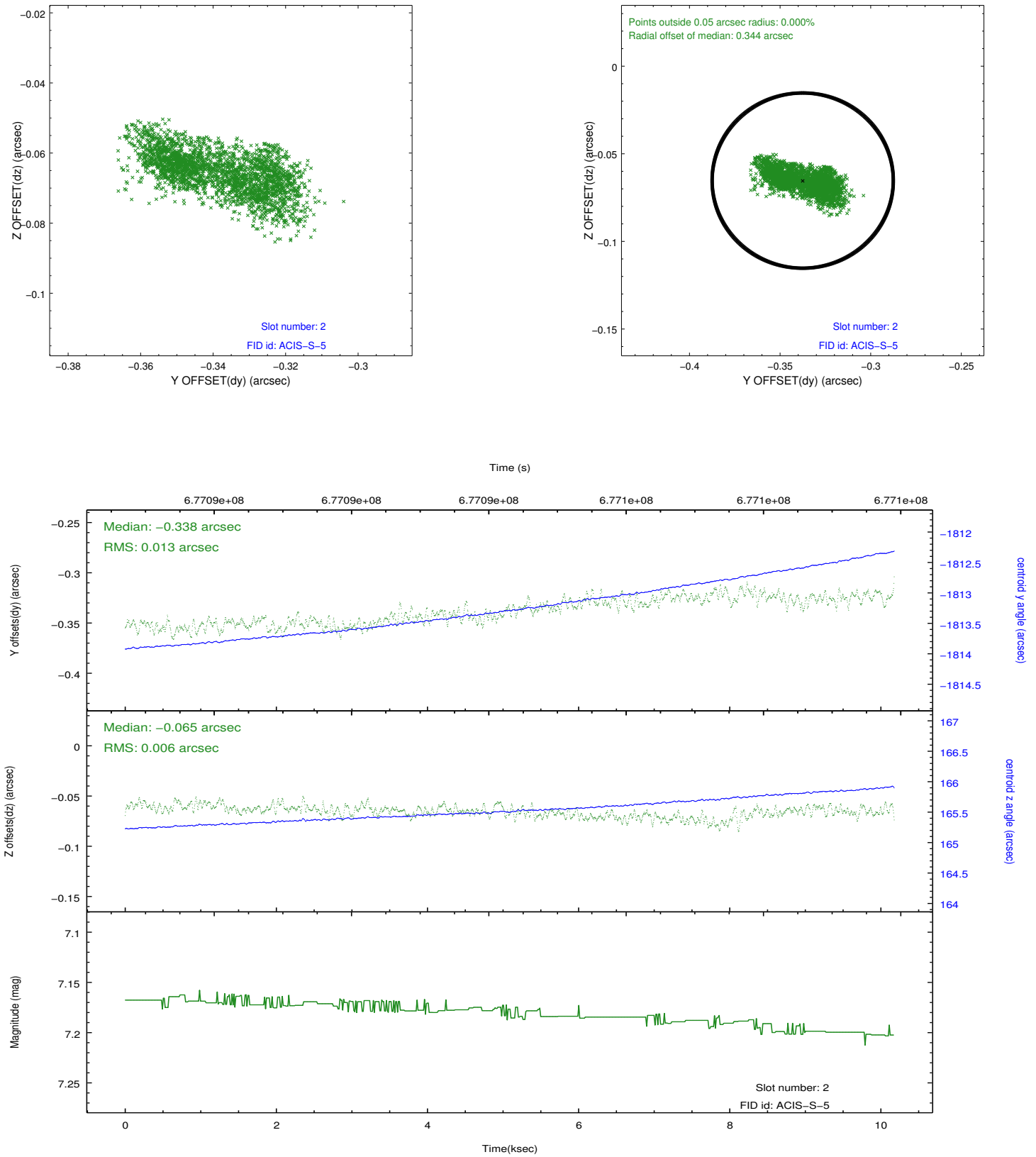
2.5.1 Slot 0



2.5.2 Slot 1

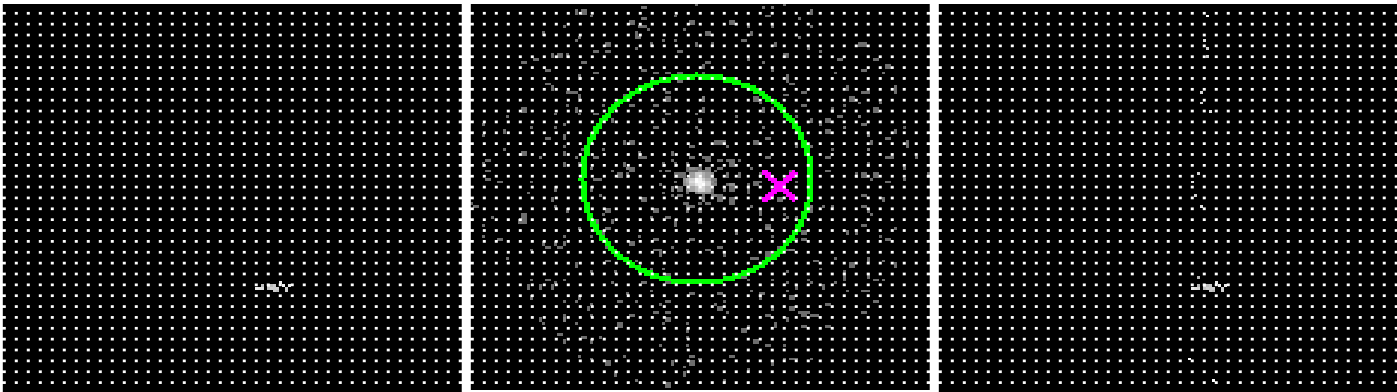


2.5.3 Slot 2



3 Gratings

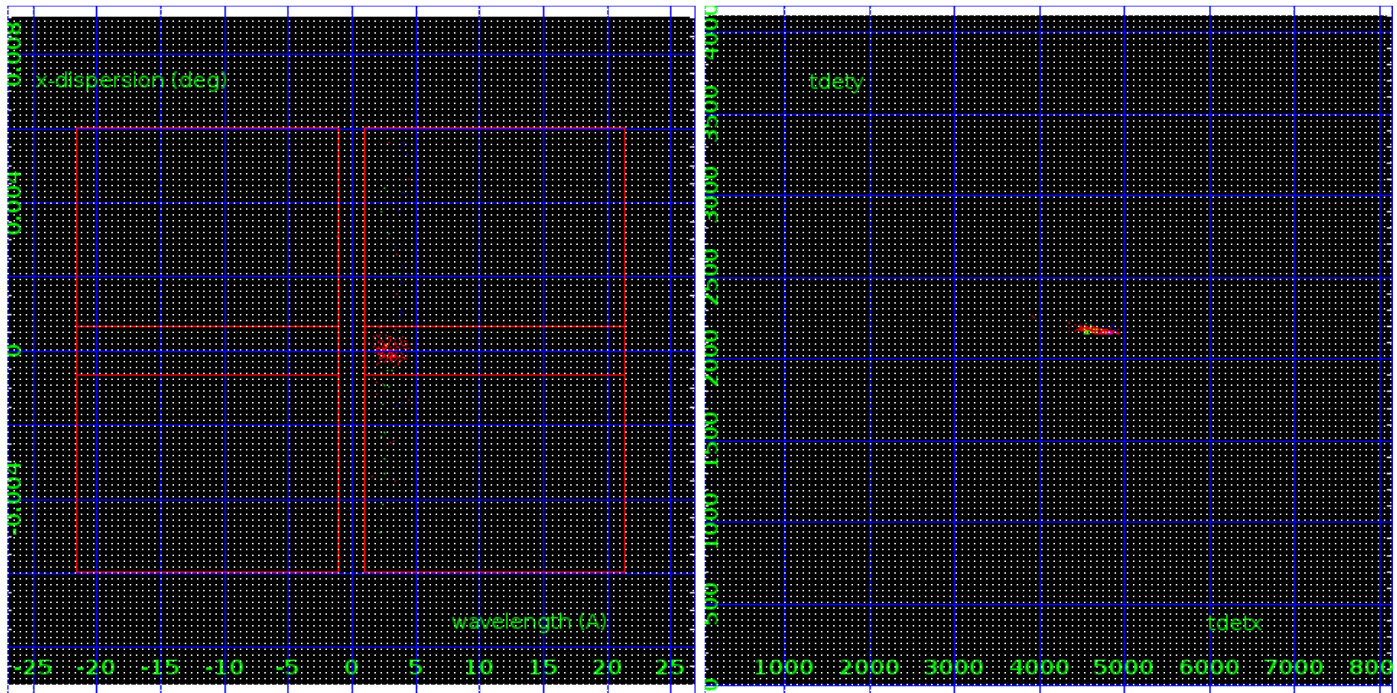
3.1 HEG Arm



HEG Order Sort 123

HEG Zero Order

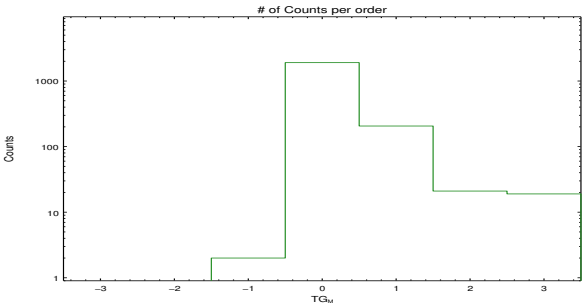
HEG Order Sort ALL

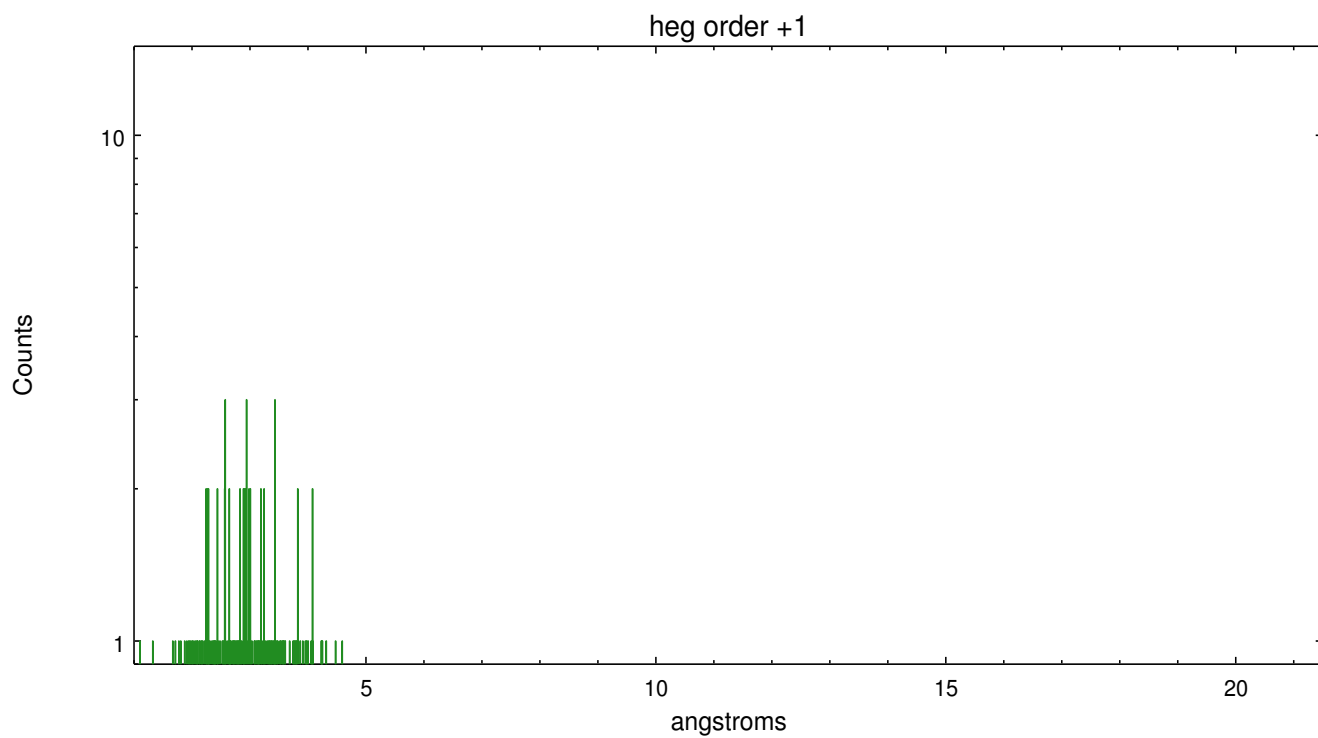
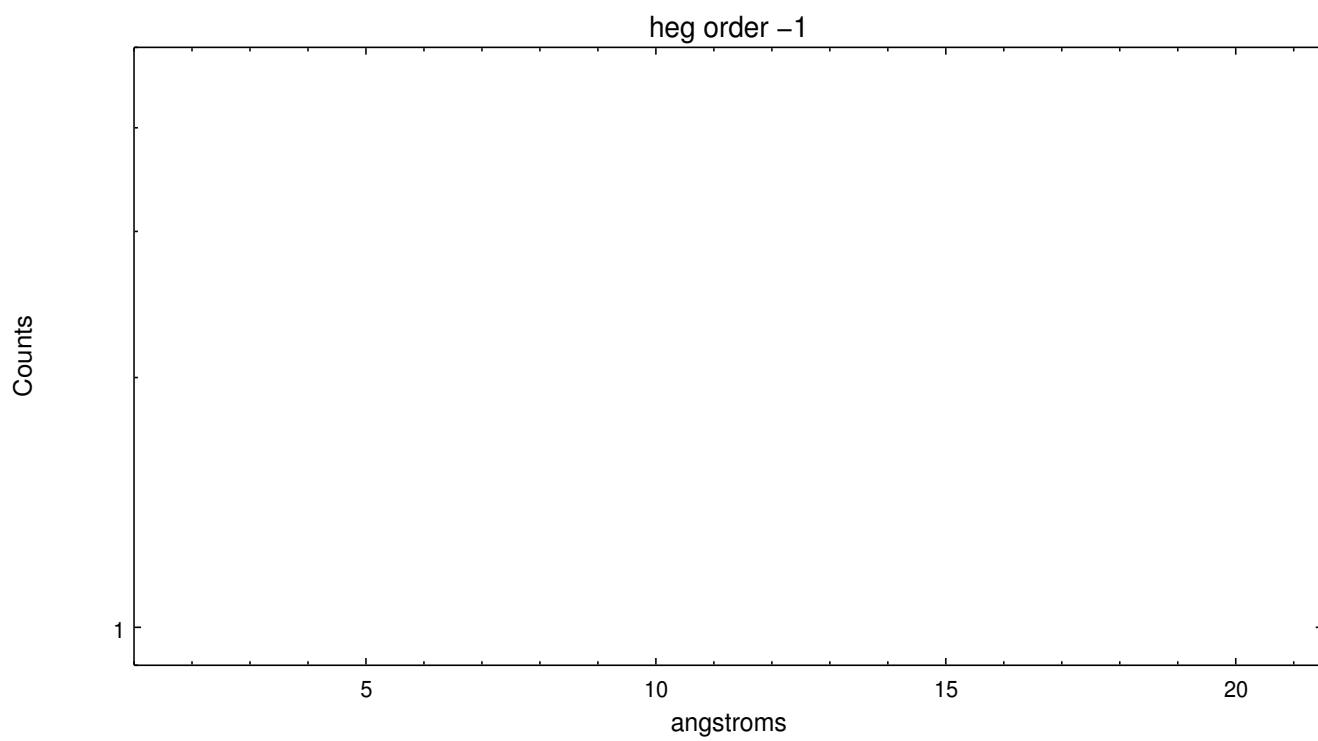


Spot Image HEG

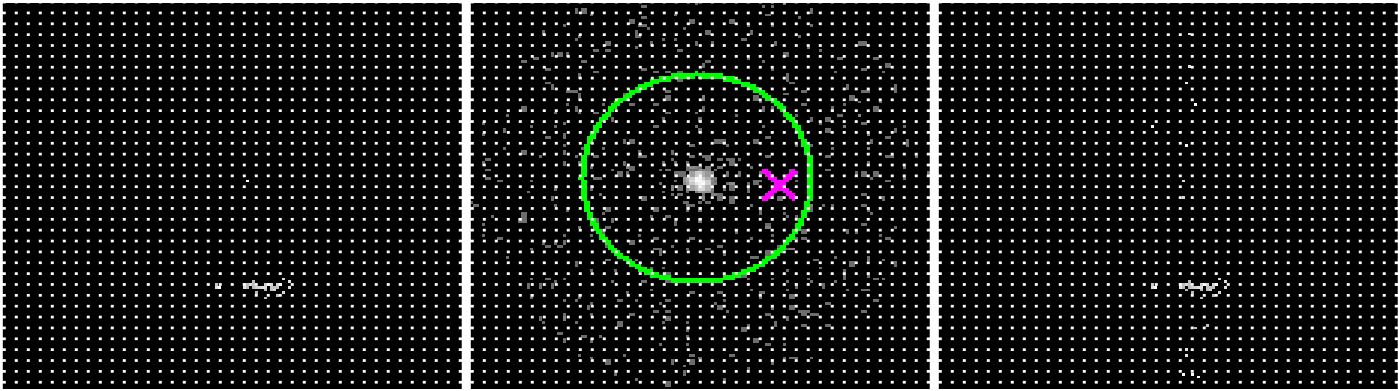
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	0	0	2	1907	206	21	19





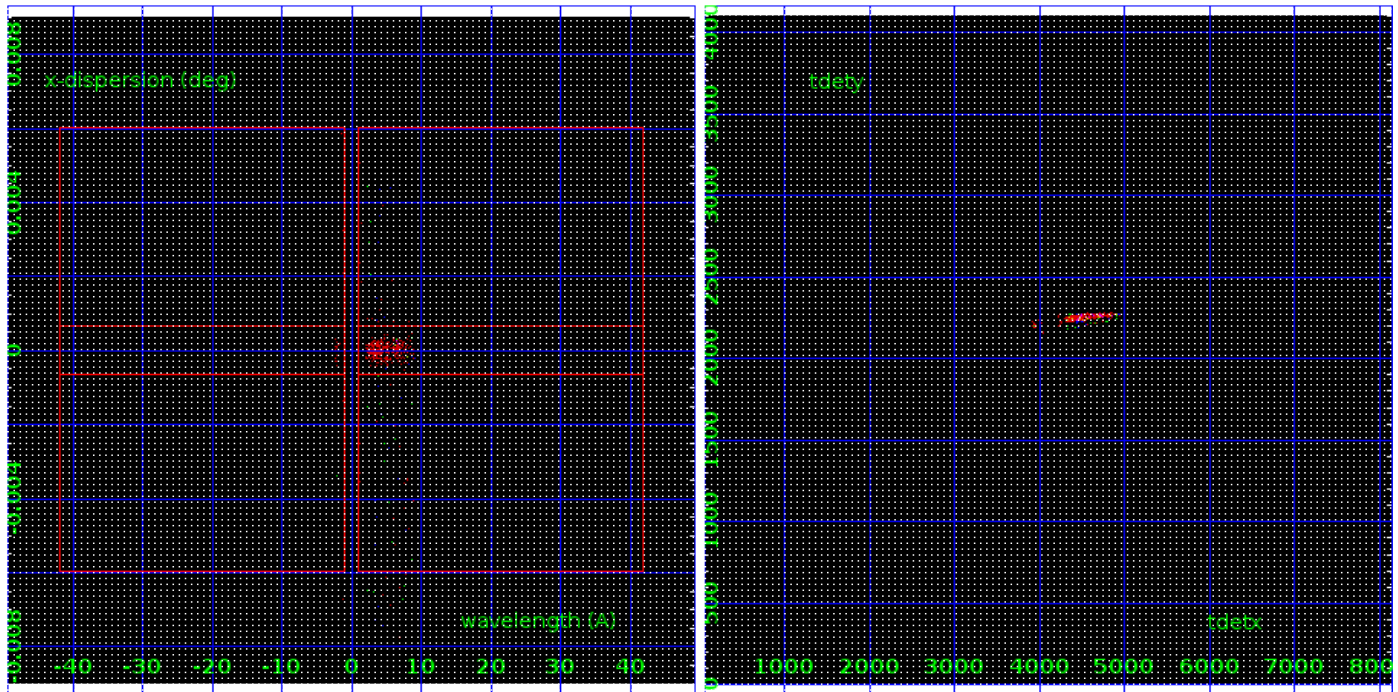
3.2 MEG Arm



MEG Order Sort 123

MEG Zero Order

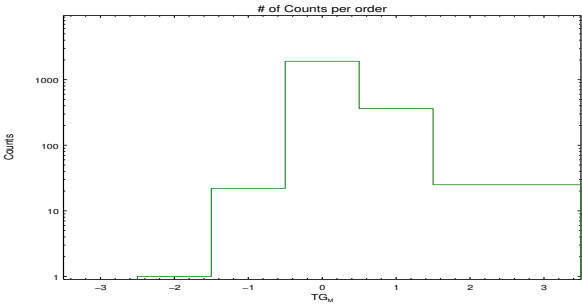
MEG Order Sort ALL

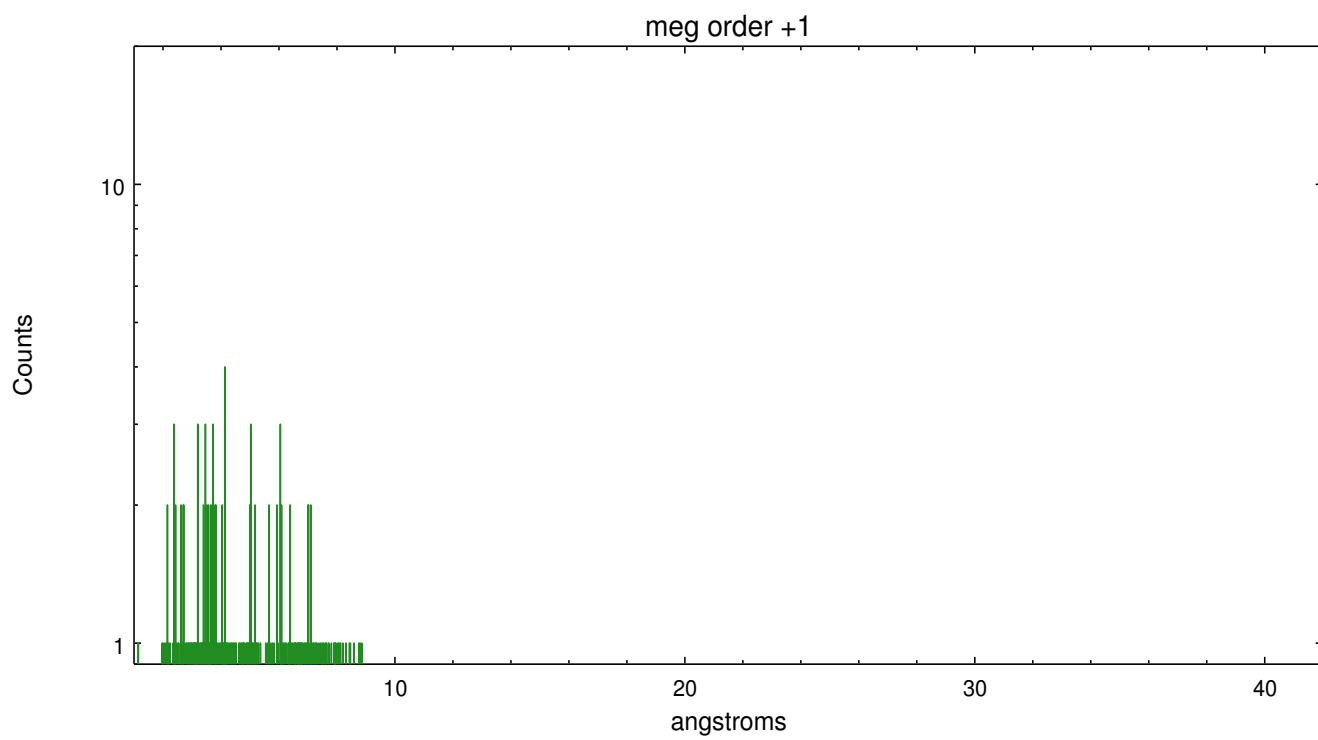
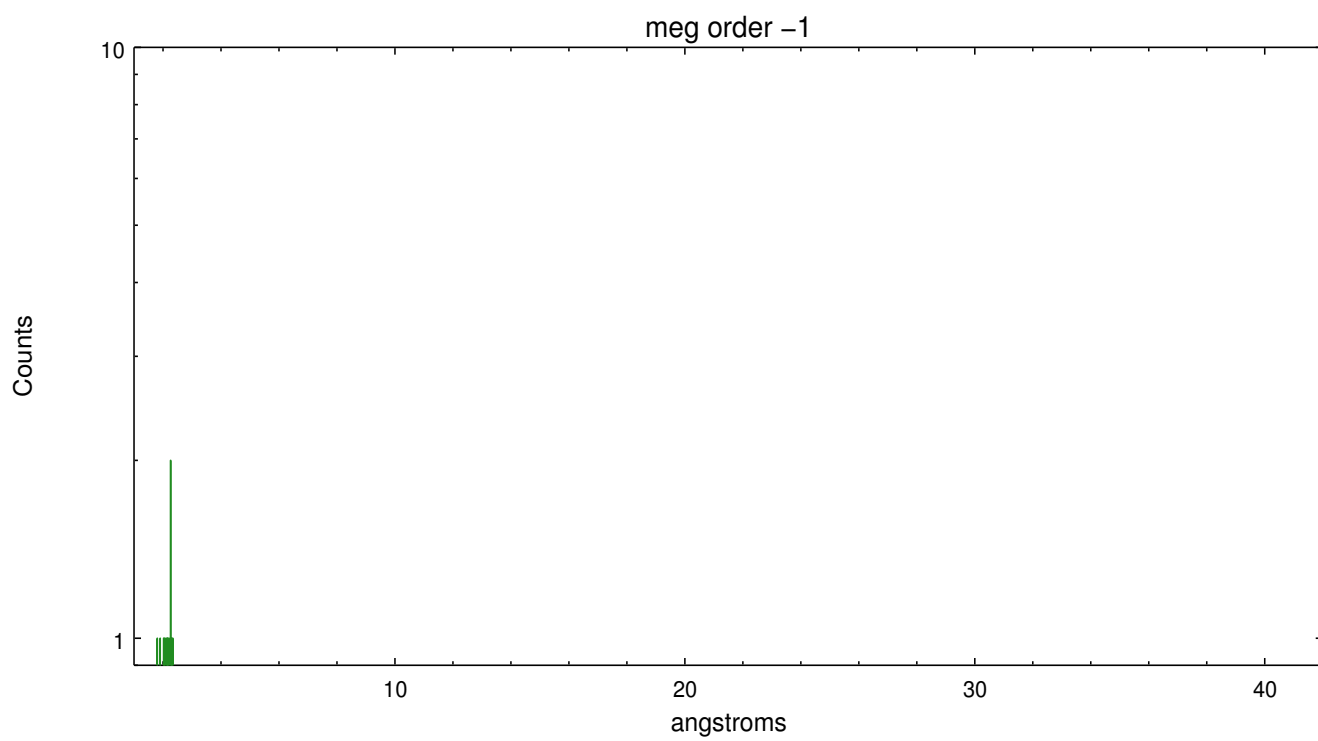


Spot Image MEG

Full Detector MEG

	order	order	order	order	order	order	order
	-3	-2	-1	0	1	2	3
Events	0	1	22	1907	362	25	25





A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2019.06.17
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.069508752227

A.2 Comments